

Title (en)
SHELL INTEGRATOR

Title (de)
SCHALENINTEGRATOR

Title (fr)
INTÉGRATEUR COQUILLE

Publication
EP 3094920 A4 20171220 (EN)

Application
EP 15733328 A 20150105

Priority
• US 201461964520 P 20140106
• US 2015010117 W 20150105

Abstract (en)
[origin: WO2015103522A1] A shell integrator has a hollow transparent body with inner and outer surfaces formed as arrays of lenslets. Each lenslet of the inner surface images a common source region in the middle of the hollow body onto a respective lenslet of the outer surface. Each lenslet of the outer surface forms a virtual image of the respective lenslet of the inner surface at the common source region. One integrator has a light-guide following the surface of the hollow body from an inlet end at a central region of the surface to an outlet end at a rim of the hollow body. The light-guide inlet end is shaped to receive light from the common source region and direct such light along the light-guide. Another integrator is generally elongated, and may be semicylindrical. Any of these integrators may have a stepped surface forming a Fresnel lens.

IPC 8 full level
F21V 5/00 (2015.01); **F21V 13/00** (2006.01); **G02B 3/00** (2006.01); **G02B 6/00** (2006.01); **G02B 27/09** (2006.01); **F21Y 115/10** (2016.01)

CPC (source: EP US)
F21V 5/045 (2013.01 - EP US); **F21V 23/0457** (2013.01 - EP US); **G02B 3/0037** (2013.01 - EP); **G02B 3/0062** (2013.01 - EP); **G02B 6/00** (2013.01 - EP); **G02B 27/0905** (2013.01 - EP); **G02B 27/0961** (2013.01 - EP); **F21V 5/008** (2013.01 - EP US); **F21Y 2113/13** (2016.08 - EP US); **F21Y 2115/10** (2016.08 - EP US)

Citation (search report)
• [AD] WO 2012040414 A2 20120329 - LIGHT PRESCRIPTIONS INNOVATORS [US], et al
• [A] WO 2012172510 A1 20121220 - KONINKL PHILIPS ELECTRONICS NV [NL], et al
• [AD] US 2012113537 A1 20120510 - MINANO JUAN CARLOS [ES], et al
• See also references of WO 2015103522A1

Designated contracting state (EPC)
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US 2015010117 W 20150105; CN 201580011457 A 20150105; EP 15733328 A 20150105